



NITE-TIMES NEWS

CHICAGO AREA TIMEX USERS GROUP

Chicago Area Timex Users Group
Volume 8, Number 1

Downers Grove, Illinois
January/February 1994

MEMORY MAP

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C.A.T.U.G. CLUB OFFICERS

Here is the list of 1994 club officers and how to contact them. The club has two strong SIGS, SPECTRUM/TS2068 and QL. If you have questions about either of these fine machines, or even the ZX81/TS1000/TS1500, call one of the officers. C=312, S=708.

POSITION	NAME	PHONE	PRIMARY FUNCTION
President	Nazir Pashtoon	S439-1679	The buck stops here...
Vice-President	Steve Cooper	S968-3553	Meeting Planning, etc.
Secretary	Larry Sauter	C763-5383	Records and Reporting
Treasurer	Frank Mills	S544-1918	Dues and Purchasing
Editor	Bob Swoger	S576-8068	Newsletter, BBS, etc.

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NITE-TIMES NEWS

Nite-Times Information

The Nite-Times News is the newsletter of the Chicago Area Timex Users Group. For an annual fee of \$12.00 you can become a CATUG member and receive six newsletters each year. Write your check payable to:

**FRANK MILLS
417 S 47th AVE
BELLWOOD IL 60104**

The Chicago Area Timex Users Group is pleased to exchange newsletters with other Timex and Sinclair supporting user groups at no charge. Send all newsletter requests to:

**CATUG EDITOR BOB SWOGER
613 PARKSIDE CIRCLE
STREAMWOOD IL 60107-1647**

If you desire to reprint any articles that appear here, please provide credit to the author and this newsletter.

We encourage your user group to copy this newsletter and distribute it at your regular meetings to your members free of any charge as we believe that this will encourage better meeting attendance. If you are a user group that feels as we do, please let us know in your newsletter so that we might do this for our members and keep our attendance up.

Articles originating from our group may be downloaded from our BBS and reprinted.

CONTRIBUTORS TO THIS ISSUE

**Cedric Bastiaans
Al Feng
Frank Mills
Larry Sauter
Bob Swoger, K9WVY**

CLUB MEETINGS

The Chicago Area Timex Users Group meets on the THIRD Saturday of each month at the home of our meeting coordinator

Steve Cooper in Downers Grove, Illinois from 1:00 to 5:00 PM. Steve's home is lovingly called the CLUB HOUSE and is located at 1300 Maple Street in Downers Grove just 2 blocks southwest of the Downers Grove Public Library. Steve should always be contacted evenings at 708/968-3553 to confirm the meeting schedule.

TREASURY NOTES

The balance as of March 1, 1994 is \$365.54 Our current paid membership stands at 13.

**Frank Mills, Treasurer
Chicago Area Timex Users Group**

SECRETARY'S NotePad

January 22, 1994

The Meeting began at 2:30 P.M. Present were Nazir Pashtoon, Frank Mills, Steve Cooper, Abed Kahale, Bob Swoger, and Larry Sauter. Paid up members: All active members are paid up as of the date of this meeting. Ten members as of today. New business: Possibility of interesting Lee Thoresen and Mark Dorinson to become a backup librarian of past newsletters, for the group should something happen to the primary library. A communication from Jeff Colma up in New York proposing that ZXir QLive and Update! be merged and Don Lambert and Bob Swoger have their own versions of why that should not be done. Definition of What LogiCall is to TS 2068 owners who have LarKen disc drive interfaces. An interface between a 2068 with a LarKen interface and a person so you can comfortably speak back and forth. The CoCo people want to look at LogiCall to see if they can write one for the CoCo and get as good a result as 2068 users have been able to do. Next time Bob Swoger promises to bring GATOR Software key chains to the

active members. At the meeting a new word processor called Spectral Writer which came to us on a Flippy disc and seems to keep up with your fingers better than most other word processors. QL Hackers Journal numbers 1 through 13, will be given to Mr. Donaldson for distribution to QL members. Bob is still having a ball playing with RLE pictures that he hasn't been able to do previously, and enjoying it. With new LogiCall 5.2 with drive 3 automatic Spectrum ROM boot up compliments of Bob Swoger. Bob Swoger was coaxing Nazir to give him more articles to cover the rest of next year, so we don't run out. Nazir will give a demo on a future meeting of using Spectrum program running on a QL computer which will be interesting and amusing. Bob wants to see The Empire Strikes Back with all the grand music in the introduction. Meeting was adjourned so we can get on to the interesting demo of the Speccy word processor "Spectral Writer".

February 19, 1994

Members present: Bob Swoger, Steve Cooper, Jeff De Courtney, Larry Sauter, Frank Mills, Abed Kahale, John Donaldson, and Nazir Pashtoon.

A review for Jeff De Courtney of the discussion of last month about the possibility of not sending out the Nite-Times News to the other user groups, but instead send our Nite-Times News to ZXir QLive Alive! and they can tack our newsletter onto ZXir QLive Alive! and maybe some of the other user groups will also send their newsletters to ZXir QLive Alive! and ZXir QLive will be a bigger and better publication and save the cost of sending out all those newsletters to all the other user groups.

Concern was also expressed about the cost of one mailing

to one user group as \$2.09 per envelope which is \$12.54 per year for a user group mailing. A question was raised about whether it should be an option to get other user groups newsletters, to further strengthen the bond we share with the Sinclair community, which this secretary thinks is more important than a few dollars spent on postage.

A discussion about the ability to reproduce the LarKen interface for people who are interested in purchasing one. Everything has not fallen into place yet so it will be some time off till this comes to pass.

John Donaldson has joined the Toronto group and got the Toronto public domain library for a membership fee of \$20.00.

The Meeting adjourned at 3:05 PM.

Larry Sauter, Acting Secretary
Chicago Area Timex Users Group

GATOR'S TWISTED PAIR

!!! REMEMBER !!!
We have a 24 hour BBS and encourage you to exchange mail and contribute to the Download Section. Use it and have fun!

Call the BBS at 708-632-5558 and register. On your next call your security level will be increased to 5 on this RBBS and you will be able to have most privileges.

Bob Swoger, SYSOP
Chicago Area Timex Users Group

ITEMS FOR SALE THROUGH THE CLUB

It has come to our attention that some LarKen Users are using something less than Version 3 firmware. The club will supply updated EPROMs, SYSTEM DISKS, and MANUALS for just \$5 which includes shipping and handling, free if ordered with LogiCall or Spectrum ROM.

If you are a LarKen LKDOS owner and would like a SPECTRUM V2 kit for your system we will supply an EPROM, socket and 74HCT32 for \$12 which includes shipping and handling. The install instructions are in your LarKen manual. We shall not be responsible for your install job. AERCO owners need only the SPECTRUM EPROM for \$10

If you have a mismatch between your LarKen DOS EPROM and your Western Digital Controller chip, we will send you the correct one for free on behalf of our friends Rod Gowen of RMG and Larry Kenny of LarKen. You should be using L3 EPROMs with WD1770 controller chips or L3F EPROMs with WD1772 controller chips. Check it out! Call in requests to Bob Swoger at W708-576-8068 H708-837-7957

SPECIAL DEALS AND BUYS

NAP_Ware (Nazir A. Pashtoon's new endeavor) announces the availability of all Timex or QL PAL (Programmable Array Logic) chips. If interested, call him evenings on 708-439-1679.

LogiCall Integrated Software Ensemble easy operating system for LKDOS in both TS2068 and Spectrum modes includes LogiCall 5.0 TASWORD TWO V2.8, VU-CALC V1.6, VU-FILE and MTERM2 Drivers modified for LogiCall, DISKS.B1 TAPES.B1 steprt.B1 HEADER.BT (tape header reader by Nazir Pashtoon) FORMAT.B MOVE.BL and more all on 2 SSDD disks for \$15. You must specify your LKDOS EPROM version. If you already have a copy you are encouraged to distribute copies to other LarKen LKDOS users for as you see by the price we are not in the business of making money on it, just making LarKen's LKDOS even better! Call in requests to Rod Gowen of RMG Enterprises or Frank Davis of Mechanical Affinity.

So you like to fly? The 747 Flight Simulator for Spectrum by Derek Ashton of DACC sold over 40K copies in EUROPE. Requires Spectrum Emulator. At this time supplied on LarKen SSDD disk only for \$10 which goes to Derek Ashton, now working at MOTOROLA with Bob Swoger. Call in requests to Bob at W708-576-8068 H708-837-7957

ARTICLES

QLuMSi DOS v4.30 by Al Feng

QLuMSi DOS, which stands for **QL.using.Microsoft.Interface Disk Operating Simulation**, has, as the version number might suggest, recently undergone a long awaited upgrade which had been partially delayed by my year of voluntary service (servitude?) on the Eastern Navajo Reservation.

Version 4 of the QLuMSi program has added the following commands:

```
CD \
CD \\[sub-DIRECTORY_prefix]
MD \\[sub-DIRECTORY_prefix]
RD \\[sub-DIRECTORY_prefix]
```

Most people with a QXL, GOLD CARD and FLP/RAM chip should welcome the ability to access sub-DIRECTORIES.

The 'MD \' command (with a "sub-DIRECTORY_name") will initiate the **MAKE_DIR** command and **MAKE** a sub-DIRECTORY on the medium. For example (you may want to try this on a dupe of your master disk), at the prompt, input the following:

```
MD \FAST
```

When you input 'DIR' (presuming you have appropriate TK2_code) you should see:

FAST ->

in place of FAST_Disk and FAST_doc.

The 'CD \' command with a sub-DIRECTORY_prefix will access:

- a) the sub-DIRECTORY on the medium; or,
- b) any other valid prefix.

Thus, if you were now to input "CD \FAST" (after performing the above example), you would see:

A:\FAST> _

Now, inputting "DIR" will show you the two files along with a data-file, e.g.:

```
FAST_Disk  
    2758 1993 Sep 19 17:00:00  
FAST_doc  
    4096 1993 Sep 19 17:00:00  
FAST_  
      64 1993 Sep 19 17:00:00
```

The 'CD \' command (without a sub-DIRECTORY_prefix) is used to return to the main DIRECTORY.

The 'RD \' command (with a "sub-DIRECTORY_name") is used to REMOVE a sub-DIRECTORY from a medium.

NOTE:

If you have several sub-DIRECTORIES with similar "names" then you may be asked whether or not you wish to REMOVE them also, e.g.:

RD \LETTER

will prompt you if you wish to REMOVE the sub-DIRECTORY name LETTER as well as LETTERS (for example).

NOTE:

If there are files in the sub-DIRECTORY, the sub-DIRECTORY will not be REMOVED.

As before, those more familiar with the standard DOS commands may opt to utilize the smaller COMMAND_COM version of the program.

Both the "full" version of the QLuMSi program as well as version 4 of the COMMAND_COM program require that your QL has the MAKE_DIR command available to it in addition to the traditional TK2_EXT code.

To accomodate those who either do not have a QXL, GOLD CARD, or FLP/RAM chip, a version of the new QLuMSi program has been included which does NOT require MAKE_DIR (hence, will not allow you to "MAKE (a sub-)DIRECTORY" on a medium. This is the QLuMSi_COMn program you will find on your master disk (use BOOT_ALT).

QLuMSi printing

In the current version, indicating the device as either COM or LPT still presumes SER. This may-or-may-not be an inconvenience for QXL users as my understanding is that some of the i/o drivers have not been written yet.

I will make necessary changes in the future as information becomes available to me.

Send comments/questions/queries to:

Al Feng
914 Rio Vista Circle SW
Albuquerque, NM 87105
U.S.A.

HAPPY TRAILS, AND COMPUTING, TO YOU ...

KEYBOARD MANIA - Part 6

By Cedric R. Bastiaans©

Page A

XII. MODIFYING THE SE-JIN TI KEYBOARD

XII.1 PREAMBLE

Before I start with the instructions for modification of the TI-99/4A keyboard, as made by SE-JIN in Korea, I would like to state that, in order to preserve space in this News Letter, I can not and will not repeat any and all observations, previously made for the KB made by ALPS in Japan, as they may relate to the SE-JIN KB.

YOU SHOULD THEREFORE READ THE FOLLOWING INSTRUCTIONS IN CONJUNCTION WITH PARTS 3 AND 4, as well as Note 1 of Part 5!

XII.2 CUTTING THE TRACES

Make the following 29 cuts. Be **VERY CAREFUL**; this PCB has very poor keyswitch identification. There are no numbers to refer to, only abbreviated keytop references and these are not consistently placed. Sometimes they are between a contact-pair (as they indeed should be), other times you'll find them either to the left or to the right of such a pair. It is **VERY EASY TO MAKE MISTAKES!** Check and double check, before you make a cut. I found myself constantly checking the wanted spot by counting each contact-pair either from the extreme left or the extreme right.

"LEFT" and "RIGHT" refer to the location of solderpads of a given pair of keyswitch contacts.

On Switch "=", cut ALL 3 traces.

On Switch "/", cut LOWER trace to LEFT pad and the trace to the RIGHT pad.

On Switch "ENT", cut trace to the RIGHT pad.

On Switch ";", cut ALL 3 traces, but cut the one to the RIGHT pad very close to it, so that the dog-legged trace from the LEFT pad of adjacent Switch "L" remains in tact!

On Switch "FCTN", cut the trace between LEFT pad and switch "SH" above it.

On Switch ">", cut BOTH traces to the RIGHT pad.

On Switch "<", cut BOTH traces to the LEFT pad.

On Switch "M", cut the trace to the RIGHT pad.

On Switch "N", cut BOTH traces to the RIGHT pad.

On Switch "SP", cut the trace to the RIGHT pad.

On Switch "B", cut trace to the RIGHT pad.

On Switch "V", cut the trace to the LEFT pad.

On Switch "C", cut the trace leading away to the right from the RIGHT pad.

On Switch "X", cut trace leading away to the right from the LEFT pad.

On Switch "Z", cut UPPER trace to the RIGHT pad.

On Switch "CTL", cut the trace to the RIGHT pad.

On Switch "AL", cut ALL 3 traces.

On Switch "SH" on the RIGHT SIDE of the PCB (directly above the "AL"switch), cut the trace to the LEFT pad and the UPPER trace to the RIGHT pad.

XII.3 PUTTING IN THE JUMPERS

In the following, we will also assume that the Alpha Lock key will become a dedicated "*" -key. All other available extra keys are for the same dedicated functions as described for the ALPS KB, i.e. ",", ".," ";" ":" and "DELETE".

Furthermore, we will sometimes use the solderpads of the straps, which are on the other (not visible) side of the PCB. These straps run, with a few exceptions, horizontally and are used to bridge one or more traces.

First, install a 1-pin terminal in the area below keyswitch "=".

And another one in the area below keyswitch "X", immediately above the SE-JIN logo.

Jumper from RIGHT "A" to the LEFT "SH" on the extreme right of the PCB.

Jumper from LEFT of this "SH" switch to RIGHT "SP".
 Jumper from RIGHT "SP" to the LEFT "SH" on the extreme left of the PCB.
 Jumper from LEFT "ENT" to LEFT "P".
 Jumper from RIGHT "=" to LEFT "O" (ZERO).
 Jumper from RIGHT "/" to RIGHT "9".
 Jumper from LEFT ";" to RIGHT "O" (OH).
 Jumper from RIGHT "FCTN" to RIGHT "L".
 Jumper from RIGHT "CTL" to RIGHT "Z".
 Jumper from RIGHT "Z" to LEFT "S".
 Jumper from LEFT "S" to the strap (righthand pad), located directly below switch "7". The pad connects to pin 13T of the connector.
 Jumper from LEFT "X" to RIGHT "D".
 Jumper from RIGHT "E" to LEFT "I".
 Jumper from LEFT "K" to RIGHT "M".
 Jumper from RIGHT "C" to LEFT "F".
 Jumper from RIGHT "N" to RIGHT "J".
 Jumper from pin 5T of the connector to pin 12T.
 Jumper from RIGHT "B" to LEFT "SP".
 Jumper from LEFT "SP" to LEFT "N".
 Jumper from RIGHT "ENT" to LEFT "L".
 Jumper the 1-pin terminal below switch "=" to the RIGHT "SH" on the left side of the PCB.
 Jumper from LEFT "Z" to RIGHT "SH" on the extreme right of the PCB.
 Jumper from LEFT "V" to LEFT "G".
 Jumper from LEFT "V" to the remaining 1-pin terminal near the SE-JIN logo.
 Jumper from RIGHT "Y" to LEFT "T".
 Jumper from LEFT "CTL" to LEFT "AL".

There should be a total of 26 jumpers.

XII.4 DEDICATED KEY FUNCTIONS

Especially with this Korean PCB, it will be imperative that you mount the diodes flush against the board. There will not be much space left between it and the computer case.

PERIOD key, switch ">".

Connect two diodes, banded sides towards RIGHT ">", from RIGHT "L" and from LEFT "K".

COMMA key, switch "<".

Connect two diodes, banded sides towards LEFT "<", from RIGHT "FCTN" and from RIGHT "J".

COLON key, switch "/".

Connect two diodes, unbanded sides towards LEFT "/", from the 1-pin terminal below switch "=" and from the strap (lefthand pad) directly below keyswitch ";".

SEMICOLON key, switch ";".

Connect two diodes, unbanded sides towards RIGHT ";", from the strap directly below it (righthand pad) and from RIGHT "P".

DELETE key, switch "=".

Connect two diodes, unbanded sides towards LEFT "=", from RIGHT "O" (ZERO) and from the 1-pin terminal in this area.

ASTERISK key, switch "AL".

Connect two diodes, banded sides towards RIGHT "AL", from RIGHT "CTL" and from the 1-pin terminal in this area.

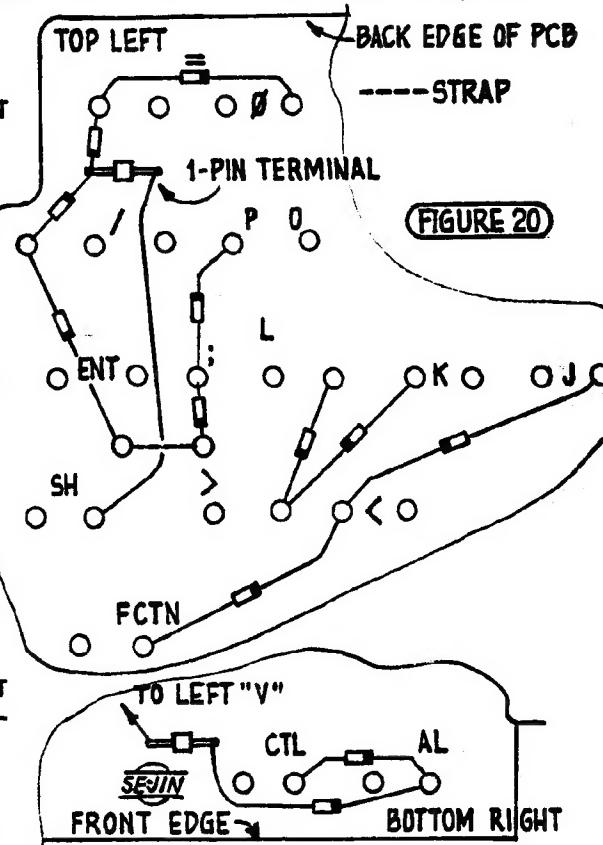
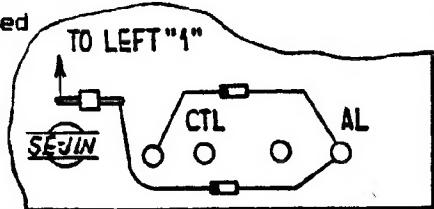


FIGURE 21

In case you need to use the "AL" key for a dedicated "@-function instead, the modifications are:

Jumper the 1-pin terminal in the "AL" area to LEFT "1" (instead of to LEFT "V"). Connect the diodes, unbanded sides towards RIGHT "AL", from LEFT "CTL" and from this 1-pin terminal.



(FIGURE 22)

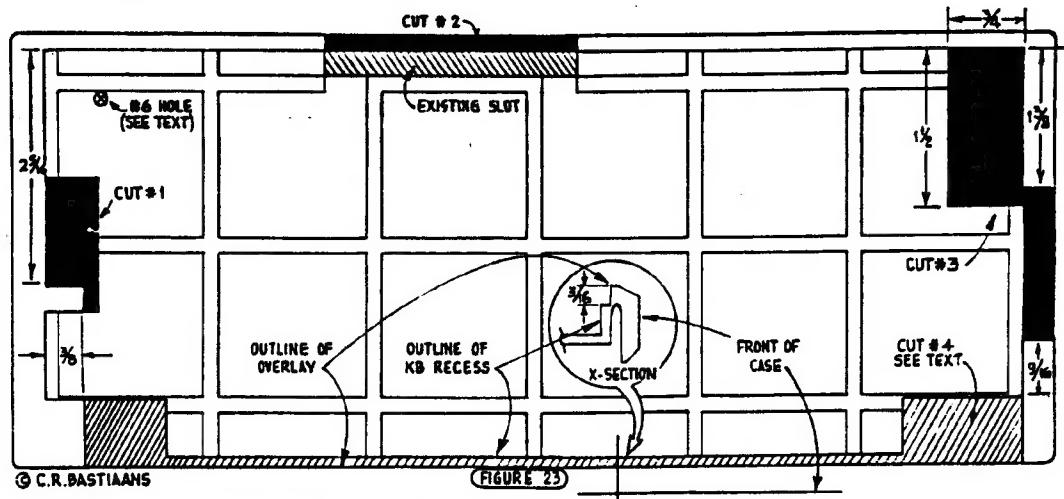
Having done this, take a straightedge, lay this diagonally across the PCB, on top of the metal flanges and check for any components that may be not be flush enough against the board.

Figure 20 shows the diode connections for the five "standard" dedicated functions. Figure 21 is for the "*", Figure 22 for the "@" connections.

XII.5 MODIFICATION OF THE COMPUTER CASE

Figure 23 shows the topview of the computer case with the FOUR cuts necessary. Cuts #2 and #3 are identical to the ones in Figure 14 of Part 4. Cut #1 is a little larger, but it is cut #4 that makes the difference.

I recommend that you try to make this cut with a Dremel tool or a milling machine. It definitely would preserve the mechanical integrity of the computer case. It IS, however, possible to again use a jewelers or a coping saw; I have done it both ways and the end result can be just as professional looking. Follow the outline of cut #4 if you elect to use a saw. If you use a Dremel tool/milling machine, limit the frontal cut to about 3/16 of an inch, as shown in the inset of the illustration. This prevents the cut from "opening up" completely. All other cuts are all the way to the bottom of the KB recess.



This concludes the instructions for modifying the Korean-made SE-JIN keyboard for the TI-99/4A.

There is at least one more version of the surplus KB available. It does not bear the "made in Japan" or "made in Korea" indications. In other words, it is made in the USA. Unfortunately, it carries the SAME number 1039019-1 as the ALPS KB, but it does NOT have a recessed PCB and its traces are totally different from either the ALPS or the SE-JIN boards!

It's been more than 3 months since I wrote Texas Instruments for a disclosure of the keyboard versions that the TI-99/4A might have had; they have ignored my letter. I have no intention to investigate the third version (are there more??); I don't have the money, nor the time or the stamina. But if you set yourself to it, Figures 9 and 10 in Part 3 really contain all the information you need to solve your own trace and jumper puzzle. After you have done so, you may be able to better appreciate all the work that I have put in this article series!

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